

Applicant: Daniel SauFu Mui  
Serial No.: 10/737,029  
Filing Date: December 16, 2003  
Docket No.: ZIL-568

### REMARKS

Reconsideration and allowance is respectfully requested.

Before entry of this amendment, claims 1-26 were pending. In the Office Action, claims 1-10, 13-16 and 18-26 were rejected, and claims 11-12 and 17 were allowed. In the present amendment, claims 22 and 25 are amended. After entry of the amendment, claims 1-26 are pending.

#### I. Claims 13-16, 19, 22 and 24-26

Claims 13-16, 19, 22 and 24-26 are rejected under 35 U.S.C. § 102(e) as being anticipated by Wouters et al. (USP 6,915,109) (Office Action, p. 4, lines 1-2).

#### A. Independent claims 13 and 22

Claim 13 recites, "A remote control device comprising: a receiver that receives a first key code signal . . . within a radio frequency band; a transmitter that transmits a second key code signal . . . within an infrared frequency band; and a keypad . . ." (emphasis added). Claim 22 as amended recites, "A remote control device, comprising: a keypad; an RF receiver; an IR transmitter" (emphasis added). Wouters does not form the basis for a valid rejection under § 102(e) because Wouters does not disclose all of the limitations of either claim 13 or claim 22. Specifically, Wouters does not disclose a device with a keypad that both receives a signal within a radio frequency band and transmits a signal within an infrared frequency band.

Wouters does not disclose a device with a keypad that transmits an IR signal and receives an RF signal. The Examiner has not stated a *prima facie* case of anticipation because that Examiner has not alleged that Wouters discloses a single device with a keypad that both transmits an IR signal and receives an RF signal. Instead, the Examiner states, "Wouters et al. teaches a remote control which includes the system of devices 1 and 2 (figure 1)

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comprising a receiver receiving a RF modulated remote control signal (col. 4 lines 25-28) and a transmitter transmitting an infrared modulated signal generated from the received RF signal (col. 4 lines 28-33)." (Office Action, p. 4, lines 3-6). The Examiner's statement that Wouters discloses a system of devices 1 and 2 that comprise an RF receiver and an IR transmitter is insufficient to allege a *prima facie* case of anticipation of claims that recite a device comprising a keypad, a receiver and a transmitter. For example, claim 13 does not recite a system of devices, but rather "a remote control device". The RF receiver, IR transmitter and keypad of Wouters are not on the same device. In fact, in Wouters the keypad on remote control unit 3 is in a separate room (1) from receiver 13 and transmitter 14 (room 2). And the unit 3, receiver 13 and transmitter 14 are the basis for the Examiner's argument. (See Office Action, p. 2, lines 10-13).

The Examiner cites column 4, lines 25-28, of Wouters as disclosing an RF receiver and column 4, lines 28-33, as disclosing an IR transmitter (Office Action, p. 4, lines 5-6). The first passage from lines 25-28 describes radio receiver 13 on a device in room 2. The second passage from lines 28-33 refers to an IR transmitter also in room 2. Wouters does not disclose a keypad in room 2. The only keypad disclosed in Wouters is on IR remote control unit 3 in room 1. The remote control unit 3 described in lines 48-57 includes IR transmitter 4 and RF transmitter 8, but does not include an RF receiver. Thus, the Examiner does not state that Wouters discloses a single device with a keypad, an RF receiver and an IR transmitter. Nor does Wouters disclose a device with all three of these elements.

Because Wouters does not disclose all of the elements of either claim 13 or claim 22, reconsideration of the § 102(e) rejection and allowance of claims 13 and 22 are requested.

#### B. Dependent claims 14-16

Claim 14 recites "said key code corresponds to a second function of a

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second electronic consumer device, as well as to said function of said electronic consumer device". The Examiner has not presented a *prima facie* argument of anticipation of claim 14 because the Examiner has not stated that Wouters discloses a single key code that corresponds to two separate functions. Instead, the Examiner states, "A key code corresponding to a second and third key code is therefore transmitted based on the selected key." (Office Action, p. 4, lines 10-11) (emphasis added). But claim 14 does not recite second and third key codes; claim 14 recites only one key code. In addition, the Examiner states that "Wouters teaches a key code generator (3) for generating key codes for controlling different function on various electrical appliances (col. 1 lines 24-26, col. 3 lines 21-35). The key codes for controlling the different devices inherently includes a first and second key code." (Office Action, p. 2, lines 17-20) (emphasis added). Claim 14 does not recite first and second key codes. Instead, claim 14 recites "said key code", "said function" and "a second function". The Examiner has not stated that Wouters discloses one key code that corresponds both to a function of an electronic consumer device as well as to a second function of a second electronic consumer device. And in fact Wouters does not disclose one key code that corresponds to two separate functions of two different electronic consumer devices.

Claim 16 recites "said key code comprises a first binary number and a second binary number, said first binary number corresponding to said function, and said second binary number corresponding to said second function". The Examiner has not presented a *prima facie* argument of anticipation of claim 16 because the Examiner has not stated that Wouters discloses a key code comprising both (i) a first binary number that corresponds to a function of an electronic consumer device as well as (ii) a second binary number that corresponds to a second function of a second electronic consumer device. Instead, the Examiner simply states, "The data from the memory is inherently store as binary data. The key code therefore comprises binary data." (Office Action, p. 4, lines 13-14). The Examiner does not mention a first binary number

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of a key code corresponding to a first function, as well as a second binary number of the same key code corresponding to a second function. In fact, Wouters does not disclose a single key code that comprises two binary numbers, one corresponding to the function of one electronic consumer device, and the other corresponding to a second function of a second electronic consumer device.

Claims 14-16 depend directly or indirectly from claim 13. In addition to the reasons explained above, dependent claims 14-16 are allowable for at least the same reasons for which claim 13 is allowable. Reconsideration of the § 102(e) rejection and allowance of claims 14-16 are requested.

#### C. Dependent claim 24

Claim 24 recites that the means of claim 22 is a microcontroller. The means of claim 22 is a "means for receiving a key code from said RF receiver". The Examiner states that Wouters discloses "a microcontroller in the form of a microprocessor for receiving the key code (col. 4 lines 52-55)" (Office Action, p. 5, lines 1-2). The passage of Wouters cited by the Examiner, however, does not disclose a microprocessor for receiving a key code from an RF receiver.

The remote control unit disclosed in the passage cited by the Examiner does not include an RF receiver. Therefore, the central processing unit (CPU) that is inside remote control unit 3 of Wouters does not receive a key code from any RF receiver. Instead, Wouters discloses that the CPU determines which code needs transmitting based on which key is tapped by the user. (No keypad is included in the devices in room 2 of Wouters.) Wouters explains:

"In this case the user taps a key, the CPU (Central processing unit) inside the remote control determines which code (corresponding to the tapped key) needs transmitting (by IR or RF) and fetches the required data from its memory which comprises a data base or other means in which tapped codes are linked to data to be transmitted" (Wouters, col. 4, lines 57-62) (emphasis added).

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Thus, Wouters does not disclose a microcontroller that receives a key code from an RF receiver.

Claim 24 depends from claim 22. In addition to the reasons explained above, dependent claim 24 is allowable for at least the same reasons for which claim 22 is allowable. Reconsideration of the § 102(e) rejection and allowance of claim 24 are requested.

D. Independent claim 19

In the Office action dated June 6, 2006, claim 19 was rejected as being anticipated by Pope (USP 5,963,624). Now in the present final Office Action, claim 19 is rejected under a new argument as being anticipated by Wouters.

Claim 19 recites, "said codeset including said first key code and said second key code, wherein said first key code corresponds to a selected function of a first electronic consumer device, and wherein said second key code corresponds to said selected function of a second electronic consumer device" (emphasis added). Wouters does not form the basis for a valid rejection under § 102(e) because Wouters does not disclose a codeset that includes two key codes: one key code corresponding to a function of one electronic consumer device, and the other key code corresponding to the same function ("said selected function") of another electronic consumer device.

The Examiner has not presented a *prima facie* argument of anticipation of claim 19 because the Examiner has not stated that Wouters discloses the two recited key codes that correspond to the same function on different electronic consumer devices. Nor has the Examiner stated that Wouters discloses that those two key codes are included in a codeset stored on a key code generator device. In fact, Wouters does not mention key codes that correspond to the same function on separate electronic consumer devices.

Because Wouters does not disclose all of the elements of claim 19, reconsideration of the § 102(b) rejection and allowance of claim 19 are requested.

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E. Independent claim 25

Claim 25 recites, “receiving a keystroke indicator signal from a remote control device; . . . transmitting said key code signal from said key code generator device to said remote control device, wherein said remote control device transmits said key code signal to an electronic consumer device.” (emphasis added). Wouters does not form the basis for a valid rejection of claim 25 under § 102(e) because Wouters does not disclose (i) receiving a keystroke indicator signal from a remote control device, (ii) transmitting a key code signal to the remote control device, and then (iii) transmitting the key code signal from the remote control device to an electronic consumer device.

The Examiner has not stated a *prima facie* case of anticipation because that Examiner has not alleged that Wouters discloses (i) receiving a signal from a remote control device, (ii) transmitting a second signal to the remote control device, and (iii) transmitting a third signal from the remote control device. Instead, the Examiner states that Wouters discloses:

“receiving a key stroke indicator signal (5) from a remote control (3) and the key code indicator signal is used by key code generator 8 to generate a key code (col. 3 lines 21-30); modulating the key code signal unto a carrier and transmitting the key code to the remote control (12) (col. 4 lines 28-33) and the remote control transmit the key code to the electronic device (col. 3 lines 31-34). Wouters et al. teaches the key code receive by the remote control is demodulated, decoded and transmitted to the appliance (col. 4 lines 25-37).” (Office Action, p. 5, lines 3-9) (emphasis added)

The Examiner argues that the recited “keystroke indicator signal” is disclosed by infrared signal 5 of Wouters. Moreover, the Examiner argues that the recited “remote control device” is infrared remote control unit 3 of Wouters. But then the Examiner improperly argues that the item labeled 12 in room 2 of Wouters is also the recited remote control device. This is improper. The Examiner has engaged in improper claim construction by arguing (i) that the recited remote control device from which a keystroke indicator signal is received is disclosed by item 3 in room 1 of Wouters for purposes of one claim limitation, and (ii) that the same

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recited remote control device is disclosed by item 12 in room 2 of Wouters for purposes of another limitation of the same claim. Alternatively, the Examiner is arguing that the recited remote control device is in two rooms of Wouters at the same time. Therefore, Wouters does not disclose the recited remote control device from which a first signal is received and to which a second signal is transmitted.

An additional reason why the Examiner's argument fails is that Wouters does not disclose that item 12 in figure 1 is a remote control device. The reference numeral 12 does not appear at all in the specification of Wouters.

Because Wouters does not disclose all of the elements of claim 25, reconsideration of the § 102(b) rejection and allowance of claim 25 are requested.

#### F. Dependent claim 26

Claim 26 recites, "wherein said codeset is not stored on said remote control device". The Examiner states that infrared remote control unit 3 of Wouters discloses the recited "remote control device". (Office Action, p. 5, line 4) The Examiner also states, "The key code is therefore not stored in the memory of the remote control" (Office Action, p. 5, lines 9-10). First, the Examiner has not stated a *prima facie* case of anticipation of claim 26 because claim 26 does not recite "wherein the key code is not stored on said remote control device". Second, Wouters does not disclose that a codeset is not stored on infrared remote control unit 3. In fact, Wouters suggests the contrary:

"In this system a remote control unit is used which comprises both an IR transmitter and an antenna for transmission of RF signals. In this case the user taps a key, the CPU (Central processing unit) inside the remote control determines which code (corresponding to the tapped key) needs transmitting (by IR or RF) and fetches the required data from its memory which comprises a data base or other means in which tapped codes are linked to data to be transmitted." (Wouters, col. 4, lines 54-62) (emphasis added).

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Third, dependent claim 26 is allowable for at least the same reasons for which claim 25 is allowable because claim 26 depends from claim 25. Reconsideration of the § 102(e) rejection and allowance of claim 26 are requested.

## II. Claims 1, 3-4 and 9

Claims 1, 3-4 and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Pope (USP 5,963,624) in view of McNair et al. (USP 5,595,342) (Office Action, p. 6, lines 1-2).

### A. Independent claim 1

Claim 1 recites, "(a) receiving a keystroke indicator signal from a remote control device; (b) generating a key code within a key code generator device . . . generating a key code signal". The combination of Pope and McNair does not form the basis for a valid rejection of claim 1 under § 103(a) because the references when combined do not teach (i) generating a key code within a key code generator device, (ii) a keystroke indicator signal as well as a key code signal, or (iii) modulating a key code.

#### (i) Neither Pope nor McNair teaches generating a key code within a key code generator device.

The Examiner states that "Pope teaches receiving a keystroke indicator signal which contains an indication of a key on the remote control device 10 that was pressed (col. 2 lines 61-col. 3 line 19), generating a key code (codes for communicating the control function to the appliances) within the code generator 12 . . ." (Office Action, p. 6, lines 3-6) (emphasis added). Pope does not, however, teach generating a key code within base unit 12. The appliance control code that is transmitted by base unit 12 of Pope is not generated within base unit 12. Instead, base unit 12 receives the appliance control codes from handset 10/50. Pope explains:

"The present invention uses a digital cordless telephone handset to store a variety of appliance control codes. These appliance control



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codes can be transmitted to a base unit. The base unit can translate the appliance control codes to control signals such as infrared control signals, to control an electrical appliance" (Pope, col. 1, lines 31-36) (emphasis added) See also Pope, col. 2, lines 48-52 and 63-65.

The appliance control codes are not generated within the base unit 12 of Pope. Instead, the appliance control codes are transmitted from the handset 10/50 to the base unit 12, where they are translated to control signals. Base unit 12 of Pope does not receive a keystroke indicator and then generate a key code. Thus, Pope does not teach the recited "receiving a keystroke indicator signal from a remote control device" (emphasis added). Pope states, "Once an appliance control code is received by the base unit, the base unit will know to transfer the control code to an appliance" (Pope, col. 4, lines 49-51) (emphasis added). Thus, in Pope, an appliance control code is received by base unit 12 and is then transferred to an appliance; the appliance control code is not generated within base unit 12.

(ii) Pope and McNair do not teach both a keystroke indicator signal and a key code signal.

The Examiner states that "Pope teaches receiving a keystroke indicator signal which contains an indication of a key on the remote control device 10 that was pressed (col. 2 lines 61-col. 3 line 19), . . ." (Office Action, p. 6, lines 3-6). Nowhere, however, does Pope teach a keystroke indicator signal in the passage cited by the Examiner, which is reproduced below in its entirety:

"Keypad 30 includes the numbers 1-9, the "star" and the "pound" key. Additionally, "up arrow" key 30a and "down arrow" key 30b can be used to scroll through a menu. A "transmit" key 30c can be used to transmit the appliance control code once the appliance control has been selected. In one embodiment, the user gets into the menu by pressing an "up arrow" or a "down arrow" key. Alternately a "menu" button (not shown) is used. The keys for numbers 1-9 can have different meanings once the user is in the menu. Menu functions can be printed above the normal telephone control keys. FIG. 1 shows compact disc, television, cable and AC signal control menu-function buttons. The setup menu can be entered, one of

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these buttons pressed, and then using the up and down arrows, the specific controls for a given electrical appliance can be scrolled through. The different appliance controls can be listed in the order of frequency of use. For example, the "mute" function could be the first function listed in each menu selection.

Alternately, individual functions can be mapped with the associated buttons of the keypad, and a display 32 need not be used. Buttons similar to a "shift," "alt," and "control" on a normal computer keypad can be used to change the meanings of buttons "0" to "9," "star," and "pound." The different meanings associated with different buttons can be printed in different colors, which are the same colors of the associated buttons "shift," "alt," or "control." (Pope, col. 2, line 61 – col. 3, line 19) (emphasis added)

Thus, the passage of Pope above teaches appliance controls and appliance control codes but does not teach a keystroke indicator signal as the Examiner maintains.

Moreover, it is improper to construe the appliance control codes of Pope to teach both a keystroke indicator signal and a key code signal. According to the tenets of claim differentiation, a "keystroke indicator signal" cannot be interpreted to be the same as a "key code signal". Such a claim interpretation is presumptively unreasonable. See, e.g., Karlin Tech. Inc. v. Surgical Dynamics Inc., 177 F.3d 968, 50 USPQ2d 1465, 1468 (Fed. Cir. 1999). In addition, such a claim interpretation would render claim 1 internally inconsistent because "keystroke indicator/key code" information that was already received by the key code generator device would later be generated by the key code generator device. Thus, Pope does not teach both a keystroke indicator and a key code. The handset 10/50 of Pope transmits an appliance control code and not a keystroke indicator.

(iii) Neither Pope nor McNair teaches modulating a key code.

The Examiner admits that Pope is silent on teaching modulating a key code onto a carrier signal. (Office Action, p. 6, line 7) Moreover, McNair does not teach modulating a key code. McNair does not teach a key code. And the

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Examiner does not state that McNair teaches modulating a key code onto a carrier signal. Instead, the Examiner states that McNair teaches “the control signal is modulated” (Office Action, p. 6, line 8). This is insufficient to establish a *prima facie* case of obviousness.

Moreover, there would be no motivation to combine McNair with Pope even if McNair did disclose a limitation of claim 1 (which it does not). McNair is directed to a control system for a gas-fired, central heating system and does not concern key code signals for electronic consumer devices.

Therefore, Pope and McNair do not form the basis for a valid rejection under § 103(a) because neither Pope nor McNair teaches (i) generating a key code within a key code generator device, (ii) a keystroke indicator signal as well as a key code signal, or (iii) modulating a key code. In addition, there is no motivation to combine McNair with Pope to arrive at all of the limitations of claim 1. For these reasons, reconsideration of the § 103(a) rejection and allowance of claim 1 are requested.

#### B. Dependent claims 3-4 and 9

Claim 9 recites, “said key code generated in (b) is part of a codeset, and wherein said remote control device does not store said codeset” (emphasis added). With respect to base claim 1, the Examiner states that “Pope teaches receiving a keystroke indicator signal which contains an indication of a key on the remote control device 10” (Office Action, p. 6, lines 3-4) (emphasis added). Thus, the Examiner considers that handset 10 of Pope teaches the remote control device recited in claim 9. The Examiner then states, “The code generated by the code generator is not store in the remote control because it is transmitted to the appliances” (Office Action, p. 6, lines 18-19). This incorrectly characterizes the teachings of Pope. The appliance control codes of Pope are indeed stored on handset 10 and are transmitted from handset 10 to base unit 12. Pope explains:

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"The present invention uses a digital cordless telephone handset to store a variety of appliance control codes. These appliance control codes can be transmitted to a base unit. The base unit can translate the appliance control codes to control signals such as infrared control signals, to control an electrical appliance" (Pope, col. 1, lines 31-36) (emphasis added)

"The cordless digital telephone handset includes a memory 66 . . . used to store the appliance control codes. Preferably, the appliance control codes can be transmitted to the base unit 12 . . ." (Pope, col. 2, lines 48-52) (emphasis added).

"Fig. 2 is a diagram of a handset 50 of the present invention. . . . The appliance control codes are stored in a memory 66" (Pope, col. 4, lines 17-28) (emphasis added).

Base unit 12 does not generate the appliance control codes. Instead, base unit 12 receives the appliance control codes, which were stored in memory 66 of handset 10, and then translates the appliance control codes into infrared control signals. Thus, Pope does not teach that handset 10 does not store a codeset.

Claims 3-4 and 9 depend from claim 1. In addition to the reasons explained above, dependent claims 3-4 and 9 are allowable for at least the same reasons for which claim 1 is allowable. Reconsideration of the § 103(a) rejection and allowance of claims 3-4 and 9 are requested.

### III. Dependent claim 2

Claim 2 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Pope in view of McNair and further in view of Goldstein (USP 5,410,326) (Office Action, p. 7, lines 1-2).

Claim 2 includes the following limitations of base claim 1, "(a) receiving a keystroke indicator signal from a remote control device; (b) generating a key code within a key code generator device . . . ." Claim 2 also recites "wherein said key code signal is transmitted in (d) from said key code generator device to said remote control device".

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None of Pope, McNair or Goldstein teaches either (i) generating a key code within a key code generator device or (ii) both a keystroke indicator signal and a key code signal. Moreover, the Examiner seems to admit that Pope and McNair are silent on teaching that the key code generator transmits the key code signal to the remote control device. (Office Action, p. 7, lines 4-10). And Goldstein does not teach this limitation.

None of Pope, McNair or Goldstein teaches transmitting a key code signal from the key code generator device back to the remote control device. The fact that Goldstein may teach sending an IR code or an entire codeset from a cable television converter box to a remote control device to update the remote control device does not teach transmitting a key code signal from a key code generator device back to the remote control device. Indeed, Goldstein does not teach transmitting a key code signal as opposed to a key code or a codeset. The cable television converter box of Goldstein does not teach a key code generator because the cable television converter box of Goldstein receives complete codesets from a remote database or is loaded with complete codesets. (Goldstein, col. 15, lines 20-68; col. 17, lines 62-67). The television converter box of Goldstein is not a key code generator because the GLUE logic 95 in the universal remote control 5, as opposed to the television converter box, generates the IR sequences from the codes. Goldstein states, "The glue logic 95 will supply the IR sequences from codes, stored in the RAM 90, upon command of the user. . . . These codes describe carrier frequencies, pulse widths and pulse duration to be generated to the glue logic 95 for producing infrared pulses from the infrared diode 97" (Goldstein, col. 13, lines 23-33) (emphasis added). Thus, Goldstein does not teach transmitting a key code signal from a key code generator.

In addition, the motivation posited by the Examiner to combine Goldstein and Pope is non-existent. (See Office Action, p. 7, lines 11-13). There would be no motivation to update the remote control device of claim 2 with new codesets, as allegedly taught by Goldstein, because claim 2 does not recite that any key

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code or codeset is ever stored on the remote control device. Claim 2 recites transmitting a key code signal to the remote control device and does not recite transmitting a codeset to the remote control device. The motivation proposed by the Examiner would only result in a combination wherein codesets, or at least key codes, are stored on a remote control device.

The combination of Pope, McNair and Goldstein does not form the basis for a valid rejection of claim 2 under § 103(a) because the combination does not teach (i) generating a key code within a key code generator device, (ii) both a keystroke indicator signal and a key code signal, or (iii) transmitting a key code signal from the key code generator device back to the remote control device. Finally, there is no motivation to combine the teachings of Goldstein with the teachings of Pope and McNair in such a way as to obtain all of the limitations of claim 2. Therefore, reconsideration of the § 103(a) rejection and allowance of claim 2 are requested.

#### IV. Dependent claims 5 and 10

Claims 5 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Pope in view of McNair and further in view of Teskey (USP 6,747,568) (Office Action, p. 7, lines 14-16).

Claims 5 and 10 depend directly or indirectly from claim 1 and include the following limitations of claim 1: "(a) receiving a keystroke indicator signal from a remote control device; (b) generating a key code within a key code generator device . . . ." None of Pope, McNair or Teskey teaches (i) generating a key code within a key code generator device or (ii) both a keystroke indicator signal and a key code signal.

In addition, claim 10 recites that "said timing information describes a digital one and a digital zero". The Examiner admits that Pope "is silent on teaching the key code comprises timing information defining the binary number (ones and zeros) in modulated." But the Examiner states that Teskey "teaches the format of the remote control signal having the necessary timing and modulation

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information (col. line 60-col. 4 line 8)" (Office Action, p. 8, lines 7-10). Teskey does not, however, teach "the necessary timing and modulation information." The passage of Teskey cited by the Examiner does not teach timing information that defines a digital one or a digital zero. In fact, Teskey does not mention a digital one, a digital zero or any type of mark/space representation.

The combination of Pope, McNair and Teskey does not form the basis for a valid rejection of either claim 5 or claim 10 under § 103(a) because the combination does not teach (i) generating a key code within a key code generator device or (ii) both a keystroke indicator signal and a key code signal. And with regard to claim 10, Teskey does not teach timing information that defines a digital one or a digital zero. Therefore, reconsideration of the § 103(a) rejection and allowance of claims 5 and 10 are requested.

#### V. Dependent claim 6

Claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Pope in view of McNair and further in view of August (USP 5,671,267) (Office Action, p. 8, lines 16-18).

Claim 6 includes the following limitations of base claim 1, "(a) receiving a keystroke indicator signal from a remote control device; (b) generating a key code within a key code generator device . . . ." None of Pope, McNair or August teaches (i) generating a key code within a key code generator device or (ii) both a keystroke indicator signal and a key code signal.

In addition, claim 6 recites, "(e) pressing a power-on key of said remote control device causing said remote control device to transmit said keystroke indicator signal that is received in (a), wherein said key code signal transmitted in (d) is received onto an electronic consumer device, and wherein said pressing in (e) causes said electronic consumer device to turn on" (emphasis added). The Examiner states that Pope "is not explicit in teaching transmitting a keystroke indicator signal that cause the appliance to turn on. One skill in the art recognizes that a remote control is generally use in turning an appliance on/off and is further

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evidence by August et al. (col. 8 lines 3-5)” (Office Action, p. 8, line 20 – p. 9, line 2). The Examiner has not presented a *prima facie* case of obviousness because the Examiner has not stated that August teaches a remote control device transmitting a keystroke indicator signal. Indeed, August does not teach a keystroke indicator signal. The passage of August cited by the Examiner teaches handset unit 10 of August using a key code signal, as opposed to a keystroke indicator signal, to turn a television set on and off. Interpreting a “keystroke indicator signal” to be the same as a “key code signal” would be contrary to the tenets of claim differentiation.

The combination of Pope, McNair and August does not teach (i) receiving a keystroke indicator signal from a remote control device, (ii) generating a key code within a key code generator, and (iii) transmitting a key code signal from the key code generator to an electronic consumer device to turn on the electronic consumer device. Nor does the combination teach both a keystroke indicator signal and a key code signal. Reconsideration of the § 103(a) rejection and allowance of claim 6 are requested.

#### VI. Dependent claim 7

Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Pope in view of McNair and further in view of Wouters (Office Action, p. 9, lines 8-10).

Claim 7 includes the following limitations of base claim 1, “(a) receiving a keystroke indicator signal from a remote control device; (b) generating a key code within a key code generator device . . . .” The combination of Pope, McNair and Wouters teaches neither (i) generating a key code within a key code generator device nor (ii) both a keystroke indicator signal and a key code signal.

In addition, claim 7 recites “wherein said key code signal is received by said remote control device”. The Examiner states that “Pope teaches the remote control receiving key code signals (infrared control signal) from a controller (col. 4 lines 52-56)” (Office Action, p. 9, lines 11-12). The Examiner has not presented



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a *prima facie* case of obviousness because the Examiner has not stated that Pope teaches a remote control device that receives a key code signal from a key code generator device that generated the key code. The passage of Pope cited by the Examiner teaches receiving an infrared signal from a controller, such as a television remote control. The cited passage does not teach receiving a key code signal from a key code generator device. Interpreting a "remote control device" to be the same as a "key code generator device" recited in the same claim would be contrary to the tenets of claim differentiation.

The combination of Pope, McNair and Wouters does not form the basis for a valid rejection of claim 7 under § 103(a) because the combination does not teach any of (i) receiving a key code signal from the key code generator device back on the remote control device, (ii) both a keystroke indicator signal and a key code signal, or (iii) generating a key code within a key code generator device. Therefore, reconsideration of the § 103(a) rejection and allowance of claim 7 are requested.

#### VII. Dependent claim 8

Claim 8 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Pope in view of McNair and in view of Wouters and further in view of August (Office Action, p. 10, lines 1-3).

The 4-way combination of Pope, McNair, Wouters and August does not form the basis for a valid rejection of claim 8 under § 103(a) for the same reasons explained above with relation to claims 1 and 7. The 4-way combination does not teach any of (i) receiving a key code signal from the key code generator device back on the remote control device, (ii) both a keystroke indicator signal and a key code signal, or (iii) generating a key code within a key code generator device. Therefore, reconsideration of the § 103(a) rejection and allowance of claim 8 are requested.

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VIII. Dependent claim 18

Claim 18 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Wouters in view of Teskey (Office Action, p. 10, lines 14-15).

The combination of Wouters and Teskey does not form the basis for a valid rejection of claim 18 under § 103(a) for the same reasons explained above with relation to claim 13. Neither Wouters nor Teskey discloses a device with a keypad that both transmits an IR signal and receives an RF signal.

Because combination of Wouters and Teskey does not disclose all of the elements of claim 18, reconsideration of the § 102(e) rejection and allowance of claim 18 are requested

IX. Dependent claims 20-21

Claims 20-21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wouters in view of August (Office Action, p. 11, lines 6-7).

Both claim 20 and claim 21 depend from claim 19 and incorporate the limitations of claim 19. The combination of Wouters and August does not form the basis for a valid rejection of either claim 20 or claim 21 under § 103(a) for the same reasons explained above with relation to claim 19. Neither Wouters nor August discloses a codeset that includes two key codes: one key code corresponding to a function of one electronic consumer device, and the other key code corresponding to the same function of another electronic consumer device. The Examiner has not presented a *prima facie* argument of obviousness because the Examiner has not stated that the combination of Wouters and August discloses a codeset with two recited key codes that correspond to the same function on different electronic consumer devices. Neither Wouters nor August teaches the recited codeset with key codes that correspond to the same function on separate electronic consumer devices. August does not mention a codeset.

Because combination of Wouters and August does not disclose a codeset with two key codes that correspond to the same function on two electronic

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consumer devices, reconsideration of the § 103(a) rejection and allowance of claims 20-21 are requested.

X. Dependent claim 23

Claim 23 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Wouters in view of Pope (Office Action, p. 11, lines 18-19).

Claim 23 depends from claim 22 and incorporates the limitations of claim 22. The combination of Wouters and Pope does not form the basis for a valid rejection of claim 23 under § 103(a) for the same reasons explained above with relation to claim 22. Neither Wouters nor Pope teaches a device with a keypad, a radio frequency receiver and an infrared transmitter.

The RF receiver, IR transmitter and keypad of Wouters are not on the same device. The remote control unit 3 of Wouters does not include an RF receiver. Pope does not teach an RF receiver. And Pope even teaches against including an IR transmitter on the handset. Pope explains:

"One advantage of having the infrared transmitter attached to the base unit 12 is that the base unit 12 can be typically powered by house current. Since no battery is used, the infrared transmitter can draw more power than is used in battery-type systems. For example, if a button is continuously pressed in a battery-type system, in order to conserve power the infrared signal is not continuously sent, but is sent intermittently. The base unit 12 connected to AC power need not be limited in this fashion. Additionally, it is also possible to have the base unit 12 supply a greater amount of power to the infrared transmitter to transmit a greater amount of infrared energy. In this manner, it may be possible for the infrared bulb to not be focused directly towards the appliance" (Pope, col. 3, lines 46-60) (emphasis added).

Because combination of Wouters and Pope does not disclose all of the limitations of claim 23, reconsideration of the § 103(a) rejection and allowance of claim 23 are requested.

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XI. Conclusion

In view of the foregoing amendments and remarks, Applicant respectfully submits that the entire application (claims 1-26 are pending) is in condition for allowance. Applicant respectfully requests that a timely Notice of Allowance be issued in this case. If the Examiner would like to discuss any aspect of this application, the Examiner is requested to contact the undersigned at (925) 550-5067.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

By *Darien K. Wallace*  
Darien K. Wallace

Date of Deposit: December 19, 2006

Respectfully submitted,

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